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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,125

06/04/2007

Andre Schlienger

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4059

76960

7590

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EXAMINER

COTRONEO, STEVEN J

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

02/07/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,125	Applicant(s) SCHLIENGER ET AL.	
	Examiner STEVEN J. COTRONEO	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/15/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/15/2010 has been entered.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 25 states that the angle between the two isthmuses through holes is between 60 and 120 degrees while claim 23 which claim 25 depends from already state the angle is 90 degrees. Therefore claim 25 contradicts itself by claiming that the holes are 90 and 60 to 120. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is

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followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 25 recites the broad recitation 60 to 120 degrees, and the claim also recites 90 degrees which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Perry (US 5,766,174) in view of Frigg et al. (US 5,041,115) and in view of Buhren et al (WO 00/06039 see US 6,547,791 for English translation) further in view of Leu et al. (US 6,270,499).

Perry discloses an intramedullary nail comprising: an elongated nail body having a proximal end, a distal end for insertion into the medullary canal, a central axis and a total length L; a proximal locking section (fig 4, 32), distal locking section (fig 4, 36), and isthmus locking section (fig 4,34) spaced along the length of the nail body, the proximal

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locking section nearest the proximal end, the distal locking section nearest the distal end, and the isthmus locking section located between the proximal and distal locking sections, and each locking section including a through-hole for receiving a locking screw; a first intermediate section (see fig 4 below) separating the proximal and isthmus locking sections, and a second intermediate section (see fig 4 below) separating the isthmus and distal locking sections, each intermediate sections having fewer through-holes per unit length than the locking sections. The intermediate section has no through-holes (fig 1).

Perry does not disclose wherein the proximal locking section forms an angle B with the intermediate section, where B is in the range of $7^{\circ} < B < 13^{\circ}$ **and does not disclose the proximal locking section comprising an elongated through hole.**

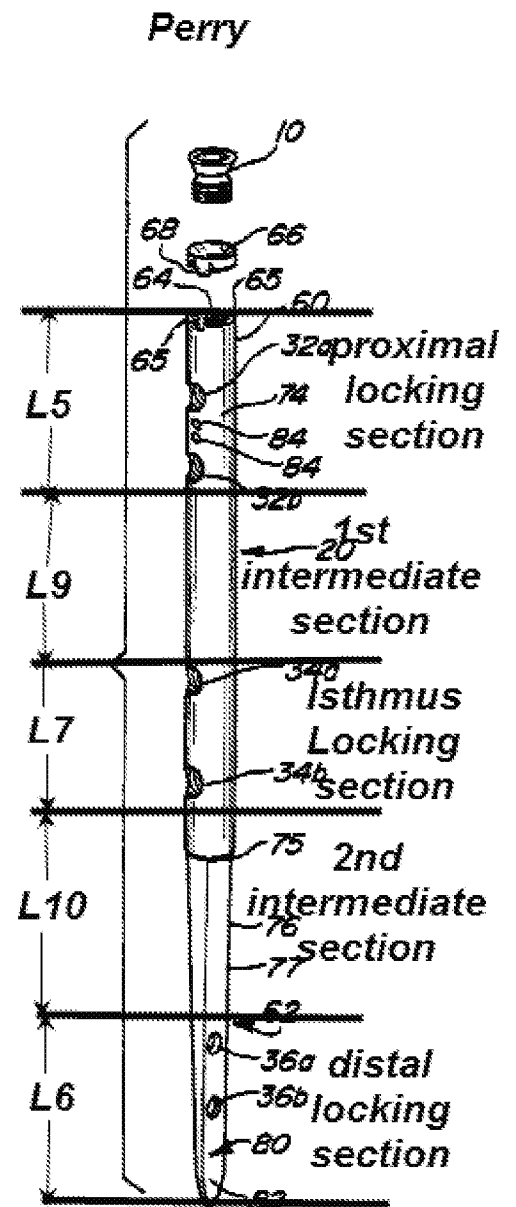
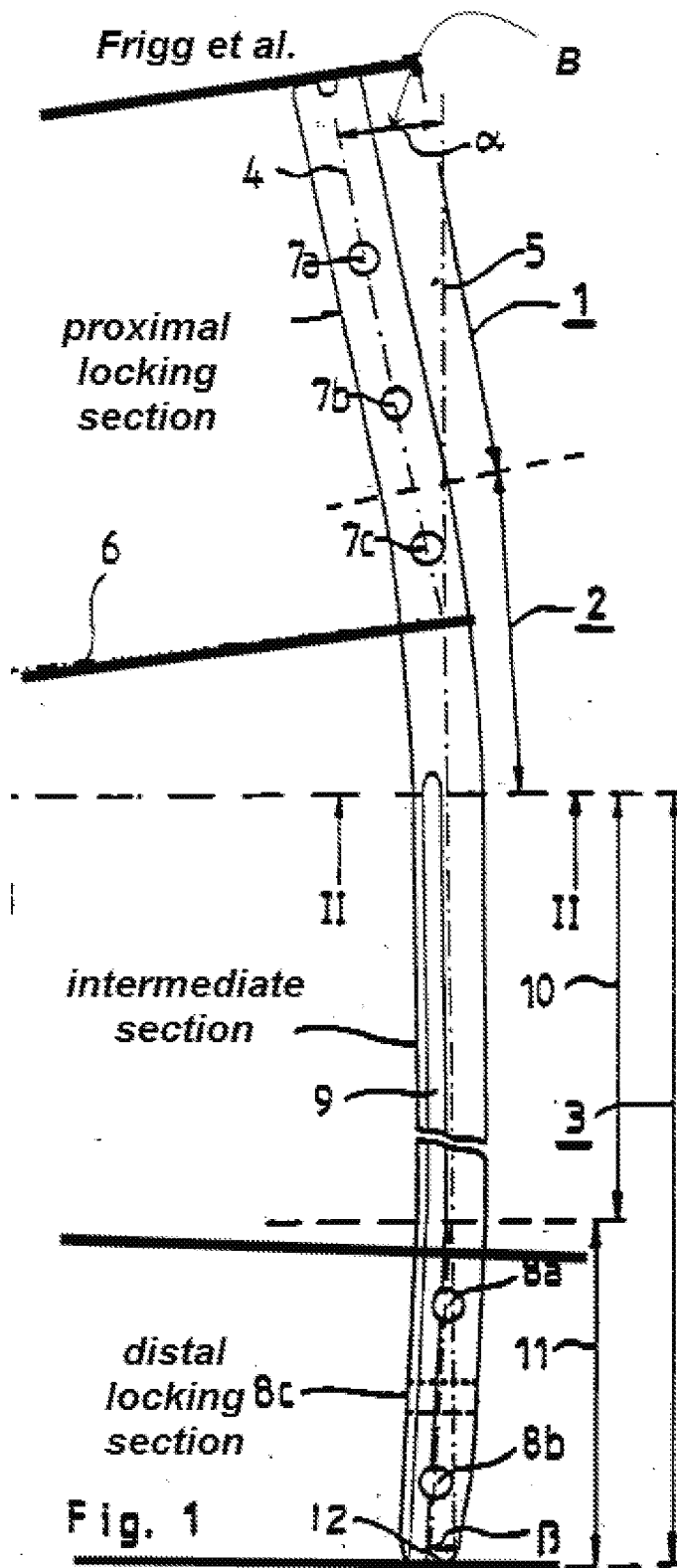
Frigg et al. a proximal locking section forms an angle B with the intermediate section (see fig 1 below), where B is in the range of $7^{\circ} < B < 13^{\circ}$ (col. 4 ll. 40-42, "8 to about 18 degrees") to allow for use in the tibia (abstract).

Buhren et al. discloses a proximal locking section comprising an elongated hole (fig 1, 32) to allow for the use of dynamic or compression locking bolts (US version col. 2 ll. 58-59)

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the device of Perry with the proximal locking section forming an angle B with the intermediate section, where B is in the range of $7^{\circ} < B < 13^{\circ}$ in view of Frigg et al. in order to allow for use in the tibia **and it would have been obvious at the time of the invention to one of ordinary skill in the art to modify the device of Perry**

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with the proximal locking section comprising an elongated hole in view of Buhren et al. in order to allow for the use of dynamic or compression locking bolts.



As to claims 14 to 19, Perry in view of Frigg et al. and in view of Buhren discloses the claimed invention except for L5 is between .22L and .28L; L6 is between .18L and .22L; L7 is between .08L and .15L; L9 is between .27L and .33L; L10 is between .13L and .30L; and L10 plus L6 is between .32L and .5L. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device with L5 is between .22L and .28L; L6 is between .18L and .22L; L7 is between .08L and .15L; L9 is between .27L and .33L; L10 is between .13L and .30L; and L10 plus L6 is between .32L and .5L, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Perry in view of Frigg et al. and in view of Buhren et al. discloses the claimed invention except for the isthmus locking section includes two through holes arranged at a relative angle A.

Leu et al. discloses the isthmus locking section includes two through holes arranged at a relative angle A (see fig 1 below) to allow accurate positioning of the intramedullary nail in the intramedullary space (col. 3, ll. 60-63).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the device of Perry in view of Frigg et al. and in view of Buhren et al. with the isthmus locking section includes two through holes arranged at a relative angle in view of Leu et al. in order to allow accurate positioning of the intramedullary nail in the intramedullary space.

Perry in view of Frigg et al. and in view of Buhren et al. in view of Leu et al. discloses the claimed invention except for the relative angle being 90 degrees. The angle between Leu et al. through holes 7 is not disclosed in the specification but appear to be around 90 degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the relative angle being 90 degrees, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

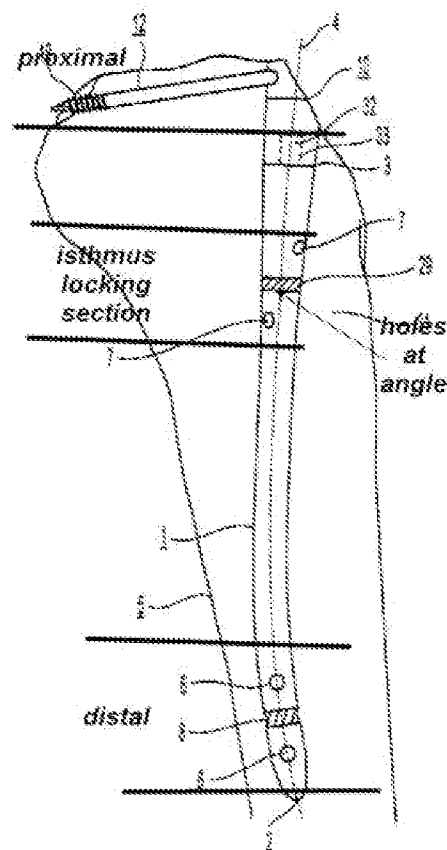


Fig. 1

Response to Arguments

Applicant's arguments with respect to claims 12-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN J. COTRONEO whose telephone number is (571)270-7388. The examiner can normally be reached on M-F 730-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J. C./
Examiner, Art Unit 3733
/EDUARDO C. ROBERT/
Supervisory Patent Examiner, Art Unit 3733

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